

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Robert H. Wohleb

Serial No.:

Group No.:

Filed:

Examiner:

For: Direct Vial Surface Sorbent Micro Extraction Device and Method

Mail Stop Patent Application

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

List of Sections Forming Part of This Information Disclosure Statement

The following sections are being submitted for this Information Disclosure Statement:

1. Preliminary Statements
2. Forms PTO 1449 (now PTO/SB/08A and 08B)
3. Copies of Listed Information Items Accompanying This Statement
4. Concise Explanation of English Language Listed Information Items
5. Identification of Person(s) Making This Information Disclosure Statement

Section 1. Preliminary Statements

Applicant(s) submits herewith patents, publications or other information, of which they are aware that they believe may be material to the examination of this application, and in respect of which, there may be a duty to disclose.

CERTIFICATION UNDER 37 C.F.R. § 1.10

I hereby certify that this Information Disclosure Statement and the documents referred to as attached thereto are being deposited with the United States Postal Service on the date listed below, in an envelope as "Express Mail Post Office to Addressee," mailing Label Number ER 216 164 183 US, addressed to the: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

September 16, 2003
Date

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The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 CFR 1.97(g)), an admission that the information cited is, or is considered to be, material to patentability, or that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13-25, at 25.

Section 2. PTO 1449 (Now Forms PTO/SB/08A and 08B)

PTO Form 1449 is attached hereto.

Section 3. Copies of Listed Information Items Accompanying This Statement

Legible copies of all items listed in Form PTO-1449 accompany this information statement.

Section 4. Concise Explanation of English Language Listed Information Items

1. U.S. Pat. No. 5,595,653 issued to Good et al., on January 21, 1997

Discloses an apparatus for extracting an analyte from a liquid sample. The apparatus comprises a microcolumn having a microparticulate media sandwiched between two compression layers. The compression layers are preferably a binder-free glass fiber, held in the microcolumn by upper and lower polypropylene mesh.

2. U.S. Pat. No. 5,635,060 issued to Hagen et al., on June 3, 1997

Discloses a solid phase extraction or chromatographic medium. The medium comprises a porous nonwoven fibrous matrix comprising at least one of polytetrafluoroethylene and blown microfibers, and sorptive or reactive hydrophobic siliceous molecular sieve particulates enmeshed in the matrix.

3. U.S. Pat. No. 5,911,883 issued to Anderson, on June 15, 1999

Discloses a solid phase extraction article having a porous, particle loaded, fibrous sheet material spiral-wrapped around its axis is provided. The sheet material is wound around itself to provide multiple layers of sheet material, each layer of sheet material being spaced from each adjacent layer of sheet material.

4. U.S. Pat. No. 5,897,779 issued to Wisted et al., on April 27, 1999

Discloses a cartridge device for removing an analyte from a fluid. The cartridge comprises a hollow core, a sheet composite comprising a particulate-loaded porous membrane and, optionally, at least one reinforcing spacer sheet. The particulate is capable of binding the analyte and the sheet composite is formed into a spiral configuration about the core.

5. U.S. Pat. No. 5,415,779 issued to Markell et al., on May 16, 1995

Discloses a particle loaded, porous, fibrous compressed or fused article for separations and purifications. The article comprises a nonwoven fibrous polymeric web, which preferably is thermoplastic, melt-extrudable, and pressure-fusible blown microfibrous web, and sorptive particles enmeshed in the web.

6. U.S. Pat. No. 5,595,649 issued to Markell et al., on January 21, 1997

Discloses a particle loaded, porous, fibrous compressed or fused article for separations and purifications. The article comprises a nonwoven fibrous polymeric web, which preferably is thermoplastic, melt-extrudable, and pressure-fusible blown microfibrous web, and sorptive particles enmeshed in the web.

7. U.S. Pat. No. 5,472,600 issued to Ellefson et al., on December 5, 1995

Discloses a gradient density filter made from sheets of blown polypropylene microfibers where the microfibers of at least one of the sheets have an effective fiber diameter less than that of the other sheets.

8. U.S. Pat. No. 5,403,489 issued to Hagen et al., on April 4, 1995

Discloses a method and apparatus for performing solid phase extraction (SPE) on a fluid that contains solubles and suspended solids. The apparatus includes a conduit, a SPE medium located in the conduit, and a fluid flow direction altering mechanism or a SPE rotating mechanism.

9. U.S. Pat. No. 5,391,298 issued to Pieper et al., on February 21, 1995

Discloses an apparatus that can be used to perform a solid phase extraction under pressurized conditions. The apparatus includes a pressurizable housing with an inlet tube that can communicate with a pump, which feeds a liquid to the housing under positive pressure. A disk assembly includes fluid-permeable, porous sheets on opposite sides of an SPE membrane.

10. U.S. Pat. No. 5,279,742, issued to Markel et al. on January 18, 1994, Reissued as U.S. Pat. No. Re. 36,811 on August 8, 2000

Discloses a method for isolating an environmentally hazardous organic contaminant from a fluid utilizing a solid phase extraction medium. The medium comprises a PTFE fibril matrix, and sorptive particles enmeshed in the matrix. The separations can be efficiently performed in a stacked disk format.

11. U.S. Pat. No. 5,691,206, issued to Pawliszyn, on November 25, 1997

Discloses a device for carrying out solid phase microextraction. The device is a fiber, solid or hollow, contained in a syringe. The syringe has a barrel, a plunger slidable within the barrel and a hollow needle extending from the end of the barrel opposite the plunger. The needle contains the fiber. When the plunger is depressed, the fiber extends beyond a free end of the needle and when the plunger is in a withdrawn position the fiber is located within the needle. To collect a sample, the needle is inserted through a septum in a bottle containing the sample and the fiber is extended into the sample. After a predetermined amount of time, the fiber is returned to the needle and the syringe is withdrawn from the bottle. The sample is analyzed by inserting the needle through a septum in a gas injection port of a gas chromatograph and extending the fiber.

12. U.S. Pat. No. 5,565,622, issued to Murphy, on October 15, 1996

Discloses a simplified method for solid phase extraction of components of interest from a sample. A syringe is used in which the inner surface of the cannula or needle is at least partially coated with a stationary phase such that aspirating the sample into the needle results in adsorption of the components of interest into the stationary phase. Aspiration of a solvent may be employed for removing the components of interest from the stationary phase for direct injection into a chromatographic instrument, or the components of interest may be removed by thermal desorption, wherein the needle is placed in the injection port of the chromatographic instrument and heated.

13. U.S. Pat. Application Pub. No. US 2002/0105923, applied for by Malik, published on October 17, 2002

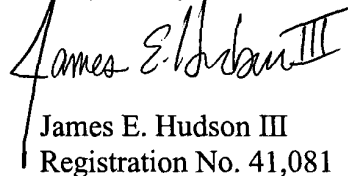
Discloses a method of preconcentrating trace analytes by extracting polar and non-polar analytes through a sol-gel coating. The sol-gel coating is either disposed on the inner surface of the capillary tube or disposed within the tube as a monolithic bed.

Section 5. Identification of Person(s) Making This Information Disclosure Statement

The person making this statement is:

- (a) ☐ the inventor(s) who signs below.
- (b) ☐ an individual associated with the filing and prosecution of this application.
- (c) ☒ the practitioner who signs below on the basis of the information:
 - ☐ supplied by the inventor(s).
 - ☐ supplied by an individual associated with the filing and prosecution of this application (37 CFR 1.56(c))
 - ☒ in the practitioner's file.

Respectfully submitted,



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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 1

Compleat if Known

Application Number	
Filing Date	
First Named Inventor	Robert H. Wohleb
Art Unit	
Examiner Name	
Attorney Docket Number	

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US- 5,595,653	01-21-1997	Good et al.	
		US- 5,635,060	06-03-1997	Hagen et al.	
		US- 5,911,883	06-15-1999	Anderson	
		US- 5,897,779	04-27-1999	Wisted et al.	
		US- 5,415,779	05-16-1995	Markell et al.	
		US- 5,595,649	01-21-1997	Markell et al.	
		US- 5,472,600	12-05-1995	Ellefson et al.	
		US- 5,403,489	04-04-1995	Hagen et al.	
		US- 5,391,298	02-21-1995	Pieper et al.	
		US- 5,279,742	01-18-1994	Markel et al.	
		US- Re. 36,811	08-08-2000	Markel et al.	
		US- 5,691,206	11-25-1997	Pawliszyn	
		US- 5,565,622	10-15-1996	Murphy	
		US- 2002/0105923	10-17-2002	Malik	
		US-			
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		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner
Signature

James E. Johnson III

Date
Considered

09/16/2003

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.